

CLAIMS

What is claimed is:

1. A method for operating a smart card to provide an application identifier (AID) for an application on the smart card, wherein the application incorporates an AID interpreter, the method comprising:
receiving a request at the AID interpreter to provide the AID for the application, wherein said AID is accessed via said AID interpreter;
retrieving a first component of the AID, wherein said first component is logically internal to the AID interpreter;
retrieving a second component of the AID, wherein said second component is logically external to the AID interpreter and is indicative of a state relevant to the application; and
combining at least the first and second components of the AID in order to generate the AID for providing in response to said request.
2. The method of claim 1, wherein said request to the AID interpreter is made by calling a method on the AID interpreter to provide the AID.
3. The method of claim 2, wherein the request to the AID interpreter is made in response to a communication from a terminal.

4. The method of claim 3, wherein the communication from the terminal comprises at least one identifier for an application to be used in a session with the terminal.
5. The method of claim 4, wherein said at least one identifier matches a portion of the AID for the application to be used in a session with the terminal, and wherein said matching portion comprises at least part of said first component of the AID logically internal to the AID interpreter, but none of said second component of the AID logically external to the AID interpreter.
6. The method of claim 1, further comprising providing the generated AID from the application to a terminal.
7. The method of claim 1, wherein the application comprises a set of Java classes and the smart card conforms to the JavaCard API.
8. The method of claim 1, wherein said first component of the AID comprises at least a registered application provider identifier (RID) portion.
9. The method of claim 8, wherein said first component of the AID further comprises a portion indicative of a firewall in which the application is located on the smart card.
10. The method of claim 1, wherein said second component is shared between a plurality of applications on the smart card.

11. The method of claim 1, further comprising processing the second component prior to combination with the first component.
12. The method of claim 11, wherein said processing the second component is performed externally to the AID interpreter.
13. The method of claim 11, wherein said processing involves data manipulation.
14. The method of claim 11, wherein said processing involves data formatting or encoding.
15. The method of claim 1, wherein retrieving the second component comprises making a call from the AID interpreter to the application.
16. The method of claim 1, wherein said AID is generated during a session with a terminal, and said session comprises updating the second component.
17. The method of claim 16, wherein said updating the second component is performed independently of the AID interpreter.
18. The method of claim 1, wherein the AID interpreter has no facility to update the second component of the AID.

19. The method of claim 1, wherein said state reflects a current balance stored on the smart card.
20. A smart card having one or more applications installed thereon, wherein at least one of the applications comprises an application identifier (AID) for the application and an AID interpreter, wherein said AID is accessed via said AID interpreter and comprises a first component logically internal to the AID interpreter and a second component logically external to the AID interpreter, wherein said second component is indicative of a state relevant to the application, and wherein the AID interpreter is operable to combine at least the first and second components of the AID in order to generate the AID.
21. The smart card of claim 20, wherein the AID interpreter incorporates a method, wherein calling the method causes the AID interpreter to provide the generated AID.
22. The smart card of claim 20, wherein the smart card comprises a communications interface for receiving a request from a terminal, and the AID is generated in response to the request.
23. The smart card of claim 22, wherein the request from the terminal comprises at least one identifier for an application to be used in a session with the terminal.

24. The smart card of claim 23, wherein said at least one identifier matches a portion of the AID for the application to be used in a session with the terminal, and wherein said matching portion comprises at least part of said first component of the AID logically internal to the AID interpreter, but none of said second component of the AID logically external to the AID interpreter.
25. The smart card of claim 20, operable to provide the generated AID from the application to a terminal.
26. The smart card of claim 20, wherein said first component of the AID comprises at least a registered application provider identifier (RID) portion and a portion indicative of a firewall in which the application is located on the smart card.
27. The smart card of claim 20, wherein said second component is shared between a plurality of applications on the smart card.
28. The smart card of claim 20, wherein the second component is processed prior to combination with the first component.
29. The smart card of claim 28, wherein said processing of the second component is performed externally to the AID interpreter.

30. The smart card of claim 20, wherein the second component is retrieved by making a call from the AID interpreter to the application containing the AID interpreter.
31. The smart card of claim 20, wherein said AID is generated during a session with a terminal, and said session comprises updating the second component.
32. The smart card of claim 20, wherein the AID interpreter has no facility to update the second component of the AID.
33. A smart card operable to provide an application identifier (AID) for an application on the smart card, wherein the application incorporates an AID interpreter, the smart card comprising:
 - means for receiving a request at the AID interpreter to provide the AID for the application, wherein said AID is accessed via said AID interpreter;
 - means for retrieving a first component of the AID, wherein said first component is logically internal to the AID interpreter;
 - means for retrieving a second component of the AID, wherein said second component is logically external to the AID interpreter and is indicative of a state relevant to the application; and
 - means for combining at least the first and second components of the AID in order to generate the AID for providing in response to said request.

34. A computer program product comprising instructions on a medium, wherein said instructions when loaded into a machine cause the machine to operate a smart card to provide an application identifier (AID) for an application on the smart card, wherein the application incorporates an AID interpreter, wherein the AID is provided by: receiving a request to the AID interpreter to provide the AID for the application, wherein said AID is accessed via said AID interpreter; retrieving a first component of the AID, wherein said first component is logically internal to the AID interpreter; retrieving a second component of the AID, wherein said second component is logically external to the AID interpreter and is indicative of a state relevant to the application; and combining at least the first and second components of the AID in order to generate the AID for providing in response to said request.

35. The computer program product of claim 34, wherein said request to the AID interpreter is made by calling a method on the AID interpreter to provide the AID.

36. The computer program product of claim 35, wherein the request to the AID interpreter is made in response to a communication from a terminal.

37. The computer program product of claim 36, wherein the communication from the terminal comprises at least one identifier for an application to be used in a session with the terminal.

38. The computer program product of claim 37, wherein said at least one identifier matches a portion of the AID for the application to be used in a session with the terminal, and wherein said matching portion comprises at least part of said first component of the AID logically internal to the AID interpreter, but none of said second component of the AID logically external to the AID interpreter.
39. The computer program product of claim 34, wherein the instructions further cause the generated AID to be provided from the application to a terminal.
40. The computer program product of claim 34, wherein the application comprises a set of Java classes and the smart card conforms to the JavaCard API.
41. The computer program product of claim 34, wherein said first component of the AID comprises at least a registered application provider identifier (RID) portion.
42. The computer program product of claim 41, wherein said first component of the AID further comprises a portion indicative of a firewall in which the application is located on the smart card.
43. The computer program product of claim 34, wherein said second component is shared between a plurality of applications on the smart card.

44. The computer program product of claim 34, wherein the instructions further cause the machine to process the second component prior to combination with the first component.
45. The computer program product of claim 44, wherein processing the second component is performed externally to the AID interpreter.
46. The computer program product of claim 44, wherein processing involves data manipulation.
47. The computer program product of claim 44, wherein processing involves data formatting or encoding.
48. The computer program product of claim 34, wherein retrieving the second component comprises making a call from the AID interpreter to the application.
49. The computer program product of claim 34, wherein said AID is generated during a session with a terminal, and said session comprises updating the second component.
50. The computer program product of claim 49, wherein updating the second component is performed independently of the AID interpreter.

51. The computer program product of claim 34, wherein the AID interpreter has no facility to update the second component of the AID.

52. The computer program product of claim 34, wherein said state reflects a current balance stored on the smart card.